

Table 2 A collection of published protein subcellular localization prediction tools

Tool name	Locations or protein features predicted	Organism categories	Publication citation
TargetP	extracellular, mitochondrial, chloroplast	non-plant, plant	Emanuelsson et al., 2000
TMHMM	transmembrane helices	any	Krogh et al., 2001
ScanProsite (PS-Scan)	ER retention signal	any	de Castro et al., 2006
SecretomeP 2.0	non-classical i.e. not signal peptide triggered protein secretion	gram-positive bacteria, gram-negative bacteria, mammal	Bendtsen et al., 2004a
Phobius	signal peptide and transmembrane topology	any	Käll et al., 2007
WoLF PSORT	> 5 locations	fungi, plant, animal	Horton et al., 2007
PRED-LIPO	lipoprotein signal peptides	gram-positive bacteria	Bagos et al., 2008
ProLoc-GO	> 5 locations	human and eukaryotes	Huang et al., 2008
KnowPredsite	> 5 locations	prokaryotes and eukaryotes	Lin et al., 2009
MultiLoc2	> 5 locations	animal, fungal, plant	Blum et al., 2009
PRED-SIGNAL	signal peptides	archaea	Bagos et al., 2009
RSLPred	chloroplast, cytoplasm, mitochondria, nucleus	oryza sativa only	Kaundal and Raghava, 2009
SherLoc2	> 5 locations	animal, fungi, plant	Briesemeister et al., 2009
Cell-PLoc 2.0	> 5 locations	eukaryote, human, plant, virus, gram-positive bacteria, gram-negative bacteria	Chou and Shen, 2010
CoBaltDB	> 5 locations	prokaryotes	Goudenège et al., 2010
PSORTb	> 5 locations	gram-positive and gram-negative bacteria	Yu et al., 2010
SCLPred	cytoplasm, mitochondrion, nucleus, secretory, chloroplast	animals, plants, fungi	Mooney et al., 2011
SignalP 4.0	signal peptide	eukaryotic, gram-positive bacteria, gram-negative bacteria	Petersen et al., 2011
SlocX	> 5 locations	arabidopsis thaliana only	Ryngajllo et al., 2011